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None

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(54) Picture coding and interpolation apparatus

(57) A picture coding apparatus operates on blocks of pixels with an orthogonal matrix transformation, 4, to generate data a the frequency content of the block, and subsequently reduces the redundancy of the data by quantisation, 6, and entropy encoding such as variable-length encoding. Additional manipulation of the picture signal, such as expansion, compression, rotation, filtering etc is achieved by multiplying the orthogonal transform matrix with another matrix within coefficients memory 5, prior to operation on the signal.
Motion compensation may be employed (Fig 3).
Also described (Fig 5) is an interpolation arrangement wherein the orthogonal matrix transformation (e.g. Discrete Cosine Transformation) is followed by an interpolation matrix transformation so as to change the number of pixels. These two matrices may be combined so that a single transformation is applied to the signal.
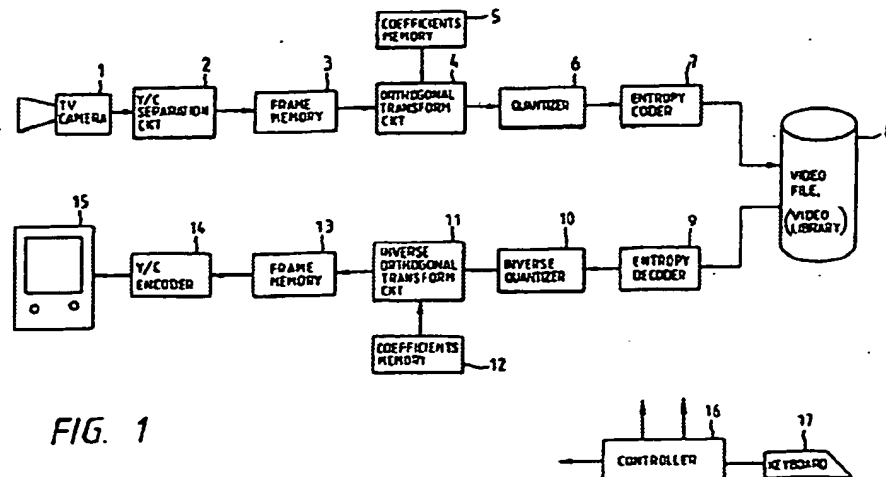

FIG. 1

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